MEAN LAKE LEVELS DURING AUGUST, 1928

BY UNITED STATES LAKE SURVEY [Detroit, Mich., September 5, 1928]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes 1			
	Superior	Michigan and Huron	Erie	Ontario
	Feet	Feet	Feet	Feet
Mean level during August, 1928:	- ***			
Above mean sea level at New York	603. 02	580. 50	572. 59	246.64
Above or below—				
Mean stage of July, 1928	+0.15	+0.09	-0.12	-0.09
Mean stage of August, 1927	+0.26	+1.02	+0.58	+0.87
Average stage for August, last 10 years	+0.83	+0.44	+0.44	+0.74
Highest recorded August stage	-0.91	-3.01	-1.52	-1,62
Lowest recorded August stage	+2.00	+2.06	+1.51	+2. 29
Average departure (since 1860) of the August level from the July level	+0.11	-0.55	-0.17	0.30

¹ Lake St. Clair's level: In August, 1928, 575.51 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERA-TIONS, AUGUST, 1928

By J. B. KINCER

General summary.—During the first decade of August dry, warm weather throughout the Northwestern States was ideal for harvesting and threshing and these activities made rapid progress, while seasonal farm work, in general, advanced well practically everywhere west of the Appalachian Mountains. Except in the East and Southeast, very little rain occurred and larger and more numerous areas were needing moisture than at any time during the current growing season. The principal sections needing rain were the lower Ohio and adjoining parts of the Mississippi Valley, the more northwestern States, and the north-central and southern Great Plains. Considerable damage resulted to crops over rather extensive areas from New Jersey and eastern Pennsylvania southward where high winds and excessive rainfall blew down considerable corn, washed fields, flooded lowlands, and whipped much fruit from trees.

During the second decade the heavy to excessive rains in the same area, following those of the previous period, did heavy damage to crops. These conditions extended from the east Gulf coast northward to southeastern Pennsylvania and New Jersey, but along the immediate coast the weather was not so unfavorable and the rains did not extend a great distance inland. In the Northeast the warm, sunshiny weather was favorable and in the Ohio Valley showers were helpful, although some parts were still dry, but in western Texas and Oklahoma drought continued; other parts of the Southwest had beneficial rains. In the Northwest and generally west of the Rocky Mountains, the warm, mostly fair, and sunny weather made conditions ideal for harvest, and irrigated crops did well, although unirrigated were badly in need of moisture.

During the last decade moderate to rather generous rain in much of the Ohio Valley was beneficial for late crops, and showers in the Southwest were helpful. There was too much moisture in portions of the Atlantic Coast States which caused further damage to crops and dry, sunny weather was much needed. It continued dry in the west Gulf area and in the Pacific Northwest, but showers were of some benefit in the Northwestern States east of the Rocky Mountains.

Small grains.—During the first decade the warm, dry weather, except in the more eastern States, made unu-

sually favorable conditions for harvesting and threshing in the late grain districts. Spring wheat harvest was well along in North Dakota and threshing was advancing in the southern portions of the belt; in north-central sections, where it had been too wet, fair, warm, sunshiny weather dried out much grain in shock. Many oats were threshed during the period and buckwheat did well, while the weather was favorable for rice and sorghum crops.

During the second decade unusually favorable weather in the late grain districts promoted good advance of harvesting and threshing. Most grains had been harvested in the spring wheat region and threshing was progressing. Considerable plowing was accomplished in the interior valleys, though this work was somewhat retarded by dry soil in the north-central Great Plains and in parts of the Ohio Valley. Threshing oats and barley progressed satisfactorily and flax did well; rice harvest was begun in Louisiana, while grain sorghums were favored in the Southwest.

At the close of the month wheat harvest had been practically completed and threshing was well along, though there was considerable interruption by rain in parts of the upper Mississippi Valley. Rains in the eastern Wheat Belt were beneficial in conditioning the soil for plowing, but only fair progress was reported from the western belt. Grain sorghums were mostly headed in the Southwest and flax was ripening rapidly in the northern Great Plains; conditions continued favorable for rice and harvest progressed well in Louisiana.

Corn.—During the first decade progress and condition of corn were mostly fair to excellent in the main producing sections, with much of the crop in roasting ears. Growth and condition were satisfactory in the Ohio Valley, and fair to excellent advance was made in Iowa, where about a third of the crop was in the roasting-ear stage. Corn made rapid advance in the Great Plains, but moisture was needed in parts; progress in the South varied from poor to good, while much was reported down in the Atlantic coast section. Rapid growth was indicated from the Great Lakes to the Rocky Mountains.

During the second decade the weather was not quite so favorable and progress varied from fair to excellent, with moisture needed in the Ohio Valley, where the crop was firing locally. In Iowa progress and condition were fair to very good, with nearly all in or past the roasting-ear stage. In parts of the Great Plains hot dry weather caused some damage; much was in hard roasting ears in Kansas, and the early crop had matured in Oklahoma. Late corn was poor in the drier areas of Texas, while in the East much was beaten down by heavy rain and wind; the crop was doing well from the Great Lakes to Montana.

During the last decade corn continued to make fair to very good progress, though there was some rather severe storm damage in localities of the upper Mississippi Valley. In the Ohio Valley rains were beneficial and in Missouri progress continued excellent. In Iowa advance was fair and the state of the crop ranged from roasting ears to well dented and nearly safe from frost. Drought in parts of the Great Plains seriously damaged corn; the crop showed deterioration in parts of Kansas and was affected to some extent in Oklahoma by dryness. There was some further damage by heavy rains in the Atlantic coast area, but otherwise good progress was noted.

Cotton.—During the first decade there was some damage to cotton in the eastern portions of the belt. In the Carolinas moderate damage was reported, but otherwise progress was fair to good, while in Georgia